

1445 North Orchard • Boise, Idaho 83706 • (208) 373-0550 www.deq.idaho.gov

Brad Little, Governor John H. Tippets, Director

December 30, 2019

Caitlin Stevens 1301 N Orchard St Suite 200 Boise, Idaho 83706

Reference No. NWW-2019-00424 - Maple Grove, Victory to Overland Project Dear Ms. Sevens:

RE:

The Department of Environmental Quality (DEQ) has considered water quality certification for construction related to the referenced project. DEQ is issuing the attached 401 Water Quality

Certification subject to the terms and conditions contained therein.

If you have any questions or further information to present please contact Kati Carberry at (208) 373-0434, or via email at Kati.Carberry@deq.idaho.gov.

Sincerely,

Aaron Scheff

Regional Administrator Boise Regional Office

KLC/am

ec:

Megan Biljan, COE, Boise

Loren Moore, DEQ State Office

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# Idaho Department of Environmental Quality Final §401 Water Quality Certification

December 30, 2019

404 Permit Application Number: NWW-2019-00424 - Maple Grove, Victory to

Overland Project

Nationwide Permit Number: 14, Linear Transportation

Applicant/Authorized Agent: Ada County Highway District

Project Location: Latitude 43.584273° N, Longitude -116.294118° W, off S. Maple

Grove Road in Boise, Idaho, in Ada County.

Receiving Water Body: Fivemile Creek, and Farmer's Lateral

Pursuant to the provisions of Section 401(a)(1) of the Federal Water Pollution Control Act (Clean Water Act), as amended; 33 U.S.C. Section 1341(a)(1); and Idaho Code §§ 39-101 et seq. and 39-3601 et seq., the Idaho Department of Environmental Quality (DEQ) has authority to review activities receiving Section 404 dredge and fill permits and issue water quality certification decisions.

Based upon our review of the joint application for permit, received on November 8, 2019, DEQ certifies that if the permittee complies with the terms and conditions imposed by the permit along with the conditions set forth in this water quality certification, then there is reasonable assurance the activity will comply with the applicable requirements of Sections 301, 302, 303, 306, and 307 of the Clean Water Act, the Idaho Water Quality Standards (WQS) (IDAPA 58.01.02), and other appropriate water quality requirements of state law.

This certification does not constitute authorization of the permitted activities by any other state or federal agency or private person or entity. This certification does not excuse the permit holder from the obligation to obtain any other necessary approvals, authorizations, or permits.

# **Project Description**

This project will widen Maple Grove Road, to the east and west, from Victory Road to Overland Road impacting Fivemile Creek, Farmer's Lateral Canal, and associated wetlands.

- The bridge structure over Fivemile Creek will be removed and replaced with a 16 feet wide x 6 ft. high x 85 ft. long precast concrete structure including new wing walls and riprap. Project impacts will include realignment and modification to a segment of Fivemile Creek; and filling below the ordinary high water mark of the existing channel (579 cubic yards) and within delineated wetlands (486 cy.).
- Culvert structures on Farmer's Lateral will be removed, realigned, and replaced with 5 ft. wide x 4 ft. high x 113 ft. long box culvert structures. Project impacts will include

dredge and fill activities below the existing ordinary high water mark (123 cy.) and impacts to associated wetlands (30 cy.).

# **Antidegradation Review**

The WQS contain an antidegradation policy providing three levels of protection to water bodies in Idaho (IDAPA 58.01.02.051).

- Tier I Protection. The first level of protection applies to all water bodies subject to Clean Water Act jurisdiction and ensures that existing uses of a water body and the level of water quality necessary to protect those existing uses will be maintained and protected (IDAPA 58.01.02.051.01; 58.01.02.052.01). Additionally, a Tier I review is performed for all new or reissued permits or licenses (IDAPA 58.01.02.052.07).
- Tier II Protection. The second level of protection applies to those water bodies considered high quality and ensures that no lowering of water quality will be allowed unless deemed necessary to accommodate important economic or social development (IDAPA 58.01.02.051.02; 58.01.02.052.08).
- Tier III Protection. The third level of protection applies to water bodies that have been designated outstanding resource waters and requires that activities not cause a lowering of water quality (IDAPA 58.01.02.051.03; 58.01.02.052.09).

DEQ is employing a water body by water body approach to implementing Idaho's antidegradation policy. This approach means that any water body fully supporting its beneficial uses will be considered high quality (IDAPA 58.01.02.052.05.a). Any water body not fully supporting its beneficial uses will be provided Tier I protection for that use, unless specific circumstances warranting Tier II protection are met (IDAPA 58.01.02.052.05.c). The most recent federally approved Integrated Report and supporting data are used to determine support status and the tier of protection (IDAPA 58.01.02.052.05).

#### **Pollutants of Concern**

The primary pollutant of concern for this project is sediment. As part of the Section 401 water quality certification, DEQ is requiring the applicant comply with various conditions to protect water quality and to meet Idaho WQS, including the water quality criteria applicable to sediment.

# Receiving Water Body Level of Protection

This project is located on Fivemile Creek within the Lower Boise River Subbasin assessment unit (AU) 17050114SW010\_03 (Fivemile Creek-3<sup>rd</sup> Order). This AU is designated for cold water aquatic life and secondary contact recreation beneficial uses. In addition to these uses, all waters of the state are protected for agricultural and industrial water supply, wildlife habitat, and aesthetics (IDAPA 58.01.02.100).

According to DEQ's (2016) Integrated Report, this AU is not fully supporting one or more of its assessed uses. The aquatic life use in this receiving water body AU is not fully supported. This AU is impaired for unknown causes (nutrients are the suspected source), chlorpyrifos, and

sediment. The contact recreation beneficial use is also not fully supported. Causes of impairment include *E. coli*. As such, DEQ will provide Tier I protection for both the aquatic life and contact recreation uses (IDAPA 58.01.02.051.01).

In addition to Fivemile Creek, this project will impact the Farmer's Lateral canal. This waterway is not included within the AU database maintained by DEQ, nor is it included in the National Hydrography dataset. Canals are man-made waterways not currently designated in Idaho WQS, Sections 110 through 160. DEQ protects these waterways for the use for which they were developed; in this case agricultural water supply (IDAPA 58.01.02.101.02). Therefore, DEQ finds Tier I protection appropriate for the Farmers Lateral.

# Protection and Maintenance of Existing Uses (Tier I Protection)

A Tier I review is performed for all new or reissued permits or licenses, applies to all waters subject to the jurisdiction of the Clean Water Act, and requires demonstration that existing uses and the level of water quality necessary to protect existing uses shall be maintained and protected. The numeric and narrative criteria in the WQS are set at levels that ensure protection of existing and designated beneficial uses.

Water bodies not supporting existing or designated beneficial uses must be identified as water quality limited, and a total maximum daily load (TMDL) must be prepared for those pollutants causing impairment. Once a TMDL is developed, discharges of causative pollutants shall be consistent with the allocations in the TMDL (IDAPA 58.01.02.055.05). Prior to the development of the TMDL, the WQS require the application of the antidegradation policy and implementation provisions to maintain and protect uses (IDAPA 58.01.02.055.04). This construction project will impact Fivemile Creek, which exceeds the suspended sediment concentration target established in the *Lower Boise River TMDL: Sediment and Bacteria Addendum* (DEQ 2015). As such this project must not cause an increase in sediment loading to Fivemile Creek or cause or contribute to an excursion above any applicable water quality standard.

To be consistent with the expectations outlined in the 2015 Lower Boise River TMDL, the applicant will install, maintain, monitor, and adaptively manage best management practices (BMPs) directed toward reducing erosion and minimizing turbidity levels in receiving water bodies downstream of the project. In addition, permanent erosion and sediment controls will be implemented, which will minimize or prevent future sediment contributions from the project area. Specifically, this project will operate under an approved Stormwater Pollution Prevention Plan. Work will occur in the off-irrigation season during periods of low flow to minimize sediment transport into open waterways. Straw wattles and silt fencing will be installed along banks in construction areas. Flows through the work zones of Fivemile Creek will be passed through the work area using coffer dams and bypass piping. If flows are observed in Farmer's Lateral, flow will be stopped using coffer dams and pumped into Fivemile Creek only after ensuring that suspended sediment has been removed from the pumped water through settling tanks, vegetative treatment, or some other similar sediment removal practice. Catch basin inserts will be installed in all storm drain catch basins. Coffer dams will be placed by hand to minimize disturbance of the stream channel and banks. Rip-rap will be placed prior to removal of the coffer dams and bypass piping. Sediment control mats will be placed immediately downstream of work area to trap disturbed sediments.

As long as the project is conducted in accordance with the provisions of the project plans, Section 404 permit, and conditions of this certification, then there is reasonable assurance the project will comply with the state's numeric and narrative criteria. These criteria are set at levels that protect and maintain existing and designated beneficial uses.

There is no available information indicating the presence of any existing beneficial uses aside from those that are already designated and discussed above; therefore, the permit ensures that the level of water quality necessary to protect both existing and designated uses is maintained and protected in compliance with the Tier I provisions of Idaho's WQS (IDAPA 58.01.02.051.01 and 58.01.02.052.07).

# Conditions Necessary to Ensure Compliance with Water Quality Standards or Other Appropriate Water Quality Requirements of State Law

#### General Conditions

- 1. This certification is conditioned upon the requirement that any modification (e.g., change in BMPs, work windows, etc.) of the permitted activity shall first be provided to DEQ for review to determine compliance with Idaho WQS and to provide additional certification pursuant to Section 401. Such modifications may not be implemented until DEQ has determined whether additional certification is necessary.
- 2. DEQ reserves the right to modify, amend, or revoke this certification if DEQ determines that, due to changes in relevant circumstances—including without limitation, changes in project activities, the characteristics of the receiving water bodies, or state WQS—there is no longer reasonable assurance of compliance with WQS or other appropriate requirements of state law.
- 3. If ownership of the project changes, the certification holder shall notify DEQ, in writing, upon transferring this ownership or responsibility for compliance with these conditions to another person or party. The new owner/operator shall request, in writing, the transfer of this water quality certification to his/her name.
- 4. A copy of this certification must be kept on the job site and readily available for review by any contractor working on the project and any federal, state, or local government personnel.
- 5. Project areas shall be clearly identified in the field prior to initiating land-disturbing activities to ensure avoidance of impacts to waters of the state beyond project footprints.
- 6. The applicant shall provide access to the project site and all mitigation sites upon request by DEQ personnel for site inspections, monitoring, and/or to ensure that conditions of this certification are being met.
- 7. The applicant is responsible for all work done by contractors and must ensure the contractors are informed of and follow all the conditions described in this certification and the Section 404 permit.
- 8. If this project disturbs more than 1 acre and there is potential for discharge of stormwater to waters of the state, coverage under the EPA Stormwater Construction General Permit

*must* be obtained. More information can be found at <a href="https://www.epa.gov/npdes-permits/stormwater-discharges-construction-activities-region-10">https://www.epa.gov/npdes-permits/stormwater-discharges-construction-activities-region-10</a>.

#### Fill Material

- 9. Fill material subject to suspension shall be free of easily suspended fine material. The fill material to be placed shall be clean material only.
- 10. All temporary fills shall be removed in their entirety on or before construction completion.
- 11. Excavated or staged fill material must be placed so it is isolated from the water edge or wetlands and not placed where it could re-enter waters of the state uncontrolled.

#### **Erosion and Sediment Control**

- 12. BMPs for sediment and erosion control suitable to prevent exceedances of state WQS shall be selected and installed before starting construction at the site. One resource that may be used in evaluating appropriate BMPs is DEQ's Catalog of Stormwater Best Management Practices for Idaho Cities and Counties, available online at <a href="http://www.deq.idaho.gov/media/494058-entire.pdf">http://www.deq.idaho.gov/media/494058-entire.pdf</a>. Other resources may also be used for selecting appropriate BMPs.
- 13. One of the first construction activities shall be placing permanent and/or temporary erosion and sediment control measures around the perimeter of the project or initial work areas to protect the project water resources.
- 14. Permanent erosion and sediment control measures shall be installed in a manner that will provide long-term sediment and erosion control to prevent excess sediment from entering waters of the state.
- 15. Permanent erosion and sediment control measures shall be installed at the earliest practicable time consistent with good construction practices and shall be maintained as necessary throughout project operation.
- 16. Top elevations of bank stabilization shall be such that adequate freeboard is provided to protect from erosion at 100-year design flood elevation.
- 17. Structural fill or bank protection shall consist of materials that are placed and maintained to withstand predictable high flows in the waters of the state.
- 18. A BMP inspection and maintenance plan must be developed and implemented. At a minimum, BMPs must be inspected and maintained daily during project implementation.
- 19. BMP effectiveness shall be monitored during project implementation. BMPs shall be replaced or augmented if they are not effective.
- 20. All construction debris shall be properly disposed of so it cannot enter waters of the state or cause water quality degradation.
- 21. Disturbed areas suitable for vegetation shall be seeded or revegetated to prevent subsequent soil erosion.
- 22. Maximum fill slopes shall be such that material is structurally stable once placed and does not slough into the stream channel during construction, during periods prior to revegetation, or after vegetation is established.

23. To the extent reasonable and cost-effective, the activity submitted for certification shall be designed to minimize subsequent maintenance.

### **Turbidity**

- 24. Sediment resulting from this activity must be mitigated to prevent violations of the turbidity standard as stipulated under the Idaho WQS (IDAPA 58.01.02). Any violation of this standard must be reported to the DEQ regional office immediately.
- 25. All practical BMPs on disturbed banks and within the waters of the state must be implemented to minimize turbidity. Visual observation is acceptable to determine whether BMPs are functioning properly. If a plume is observed, the project may be causing an exceedance of WQS and the permittee must inspect the condition of the projects BMPs. If the BMPs appear to be functioning to their fullest capability, then the permittee must modify the activity or implement additional BMPs (this may also include modifying existing BMPs).
- 26. Containment measures such as silt curtains, geotextile fabrics, and silt fences must be implemented and properly maintained to minimize instream sediment suspension and resulting turbidity.
- 27. Turbidity monitoring must be conducted, recorded, and reported as described below. Monitoring must occur each day during project implementation when project activities may result in turbidity increases above background levels. A properly and regularly calibrated turbidimeter is required to document compliance with the turbidity requirement.

A downstream sample must be taken following an upstream sample in order to obtain meaningful and representative results. Results from the downstream point sampling must be compared to the upstream/background levels to determine whether project activities are causing an exceedance of state WQS.

If the downstream turbidity is 50 NTUs or more than the upstream turbidity, then the project is causing an exceedance of the WQS.

Use the following (3) steps to ensure compliance with the turbidity standard:

- a) If a plume is observed, quantify the plume by collecting turbidity measurements upstream and within the plume and compare the results to Idaho's instantaneous numeric turbidity criterion (50 NTU over the background).
- b) If turbidity is less than 50 NTU instantaneously over the background turbidity; continue monitoring as long as the plume is visible. If turbidity exceeds background turbidity by more than 50 NTU instantaneously then stop all construction activities and take immediate action to address the cause of the exceedance.

c) Continue construction activities once turbidity readings return to within 50 NTU instantaneously and 25 NTU for more than ten consecutive days over background turbidity.

Copies of daily logs for turbidity monitoring must be available to DEQ upon request. The report must describe all exceedances and subsequent actions taken, including the effectiveness of the action.

#### In-water Work

- 28. Work in open water is to be kept at a minimum and only when necessary. Equipment shall work from an upland site to minimize disturbance of waters of the state. If this is not practicable, appropriate measures must be taken to ensure disturbance to the waters of the state is minimized.
- 29. Construction affecting the bed or banks shall take place only during periods of low flow.
- 30. Work in waters of the state shall be restricted to areas specified in the application.
- 31. Measures shall be taken to prevent wet concrete from entering into waters of the state when placed in forms and/or from truck washing.
- 32. To minimize sediment transport, stream channel or stream bank stabilization must be completed prior to returning water to a dewatered segment.
- 33. Discharges from Farmer's Lateral into Fivemile Creek will be free from suspended sediment by methods such as: settling tanks, vegetative treatment, or other similar sediment removal practices.

#### Pollutants/Toxics

34. The use of chemicals such as soil stabilizers, dust palliatives, sterilants, growth inhibitors, fertilizers, and deicing salts during construction and operation should be limited to the best estimate of optimum application rates. All reasonable measures shall be taken to avoid excess application and introduction of chemicals into waters of the state.

# **Dredge Material Management**

35. Upland disposal of dredged material must be done in a manner that prevents the material from re-entering waters of the state.

# Management of Hazardous or Deleterious Materials

- 36. Petroleum products and hazardous, toxic, and/or deleterious materials shall not be stored, disposed of, or accumulated adjacent to or in the immediate vicinity of waters of the state. Adequate measures and controls must be in place to ensure that those materials will not enter waters of the state as a result of high water, precipitation runoff, wind, storage facility failure, accidents in operation, or unauthorized third-party activities.
- 37. Vegetable-based hydraulic fluid should be used on equipment operating in or directly adjacent to the channel if this fluid is available.

- 38. Daily inspections of all fluid systems on equipment to be used in or near waters of the state shall be done to ensure no leaks or potential leaks exist prior to equipment use. A log book of these inspections shall be kept on site and provided to DEQ upon request.
- 39. Equipment and machinery must be removed from the vicinity of the waters of the state prior to refueling, repair, and/or maintenance.
- 40. Equipment and machinery shall be steam cleaned of oils and grease in an upland location or staging area with appropriate wastewater controls and treatment prior to entering a water of the state. Any wastewater or wash water must not be allowed to enter a water of the state.
- 41. Emergency spill procedures shall be in place and may include a spill response kit (e.g., oil absorbent booms or other equipment).
- 42. In accordance with IDAPA 58.01.02.850, in the event of an unauthorized release of hazardous material to state waters or to land such that there is a likelihood that it will enter state waters, the responsible persons in charge must
  - a. Make every reasonable effort to abate and stop a continuing spill.
  - b. Make every reasonable effort to contain spilled material in such a manner that it will not reach surface or ground waters of the state.
  - c. Call 911 if immediate assistance is required to control, contain, or clean up the spill. If no assistance is needed in cleaning up the spill, contact the appropriate DEQ regional office during normal working hours or Idaho State Communications Center after normal working hours (1-800-632-8000). If the spilled volume is above federal reportable quantities, contact the National Response Center (1-800-424-8802).
    - Boise Regional Office: 208-373-0550 / 888-800-3480
  - d. Collect, remove, and dispose of the spilled material in a manner approved by DEQ.

#### **Culverts**

- 43. To prevent road surface and culvert bedding material from entering a stream, culvert crossings must include best management practices to retain road base and culvert bedding material. Examples of best management practices include, but are not limited to, parapets, wing walls, inlet and outlet rock armoring, compaction, suitable bedding material, anti-seep barriers such as bentonite clay, or other acceptable roadway retention systems.
- 44. The culvert shall not constrict the stream channel and shall not be angled such that the outflow is directed toward the stream bank. The culvert's flow line shall match the existing stream invert at its entrance and exit. Adequate grade control shall be installed to prevent channel down cutting or excessive deposition from occurring.
- 45. The culvert shall be installed such that it does not impede fish passage.
- 46. The culvert outflow shall be armored with riprap to provide erosion control. This riprap will be clean, angular, dense rock that is free of fines and resistant to aquatic decomposition.
- 47. Culverts shall be sized appropriately to maintain the natural drainage patterns.

# **Right to Appeal Final Certification**

The final Section 401 Water Quality Certification may be appealed by submitting a petition to initiate a contested case, pursuant to Idaho Code § 39-107(5) and the "Rules of Administrative Procedure before the Board of Environmental Quality" (IDAPA 58.01.23), within 35 days of the date of the final certification.

Questions or comments regarding the actions taken in this certification should be directed to DEQ Boise Regional Office, Kati Carberry, (208) 373-0434 or <a href="mailto:Kati.Carberry@deq.idaho.gov">Kati.Carberry@deq.idaho.gov</a>.

Aaron Scheff

Regional Administrator

Boise Regional Office